Probability - Questions

1.

3. The Venn diagram shows three events A, B and C, where p, q, r, s and t are probabilities.
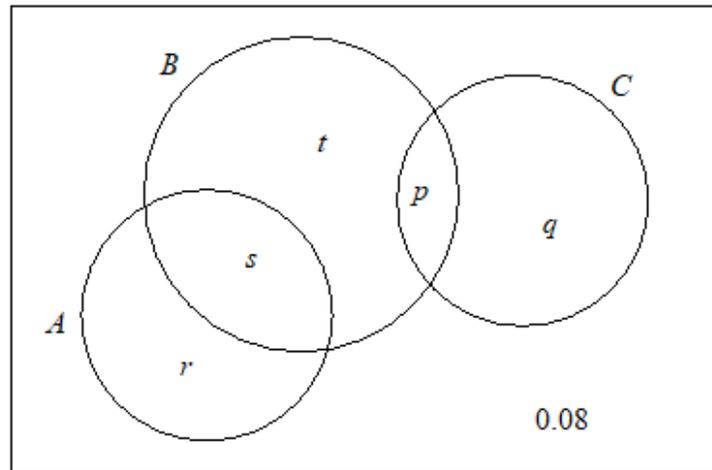
$P(A) = 0.5$, $P(B) = 0.6$ and $P(C) = 0.25$ and the events B and C are independent.

(a) Find the value of p and the value of q.

(2)

(b) Find the value of r.

(2)

(c) Hence write down the value of s and the value of t.

(2)

(d) State, giving a reason, whether or not the events A and B are independent.

(2)

(e) Find $P(B \mid A \cup C)$.

(3)